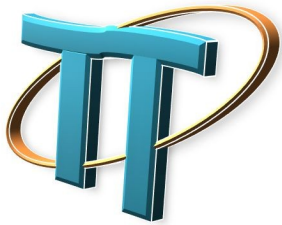


# The India Patents Act, 1970 and Software Patentability

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MIP India IP & Innovation Forum  
New Delhi | March 07, 2013



[www.paai.org.in](http://www.paai.org.in)

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# Legal Provisions

## Section 2(1)(j)

"invention" means a new product or process involving an inventive step and capable of industrial application;

## Section 3(k)

A mathematical, or business method or a computer programme per se or algorithms are not inventions and hence not patentable.

# Section 3(k): Problems

- All computer implemented product/ process (“software”) are not mathematical, business methods, computer program per se and algorithms.
- Softwares are more or less related to mathematical methods and/ or algorithms, so is it an end of the software patent?
- If no, a line should be drawn to distinguish the patentable and un-patentable subject matter.

# Solutions: Understanding softwares

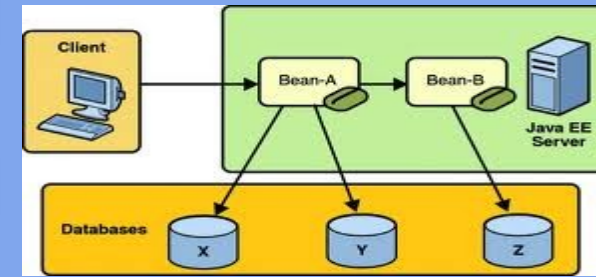
- A software professional's view describes various types of softwares based on the nature of works involved in the development.
  - Software embedded with specific hardware
  - System software for general purpose hardware
  - Application software
    - Implements established methods/ algorithms such as mathematical methods or business methods

# Solutions: Types of Softwares

Type of Software	Example
Software for specific hardware or device	Embedded system
System softwares	Operating system
	Firmware
	Device driver
	Registry cleaner
	Anti-virus
	Archivers
	Bios
	Disk compression
	Network utilities
	Middleware
	Compiler
	Application softwares
File password generator	
Online shopping	
Office suite	
Simulation software	

# Solutions: Case Laws

## Business methods



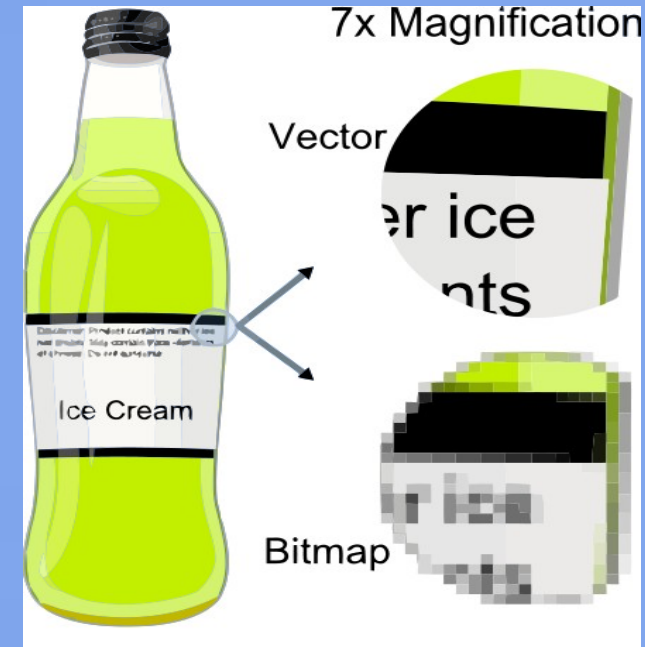
*Yahoo vs Controller and Rediff.com, the IPAB concluded, “This is nothing but doing the advertisement business electronically... technical advance that is claimed ... is only an improvement in the method of doing business and S.3(k) is clear that business method cannot be patented, ... Therefore, we affirm that this ground alone is sufficient to reject the present application.”*

# Solution: Interpretation

## Mathematical methods

- Is it referring to a software implementing one or more established mathematical methods ?

e.g vector graphics application.



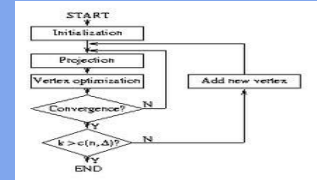
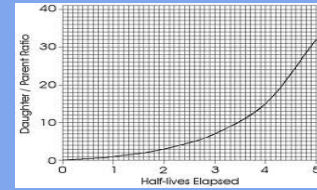
## Algorithms

- Is it referring to a software implementing one or more established algorithms.

e.g encryption/ decryption software implementing DES algorithm.

# Solution: Case Laws (Contd..)

## Mathematical methods & Algorithms



- In a case of *Cybersource v. Retail Decisions*, 654 F.3d 1366 (Fed. Cir. 2011)
- The Court ruled that no-patenting-math rule doesn't apply if the math in question complicated enough that "as a practical matter, the use of a computer is required" to perform the calculations.



# Solutions: Case Laws (contd..)

- Citing a previous case *Research Corp. Techs. v. Microsoft Corp.*, the court stated,

*“... the method could not, as a practical matter, be performed entirely in a human’s mind.*

*In contrast, it is clear in the present case that one could mentally perform the fraud detection method ..... of the '154 patent ... attempt to capture unpatentable mental processes (i.e., abstract ideas), they are invalid under § 101.”*

# Solutions: Case Laws (contd..)

- In a recent order dated Nov 23rd, 2012 in the matter of 6067/DELNP/2005 filed by Microsoft Corp., the India Patent Office stated,

“...to control a new computer to cause it to perform desired operation, without special adaptation or modification of its hardware components, then no matter whether claimed as computing device or a method implemented in a type checking system...is not patentable u/s 3(k)...”

# Solutions: Case Laws (contd..)

- In another recent order dated Jun 01st 2012 in the matter of 965/DELNP/2004 filed by Microsoft Corp., the India Patent Office stated,

“...should clearly define the inventive constructional hardware features... An apparatus claim... is a concrete product, consisting of many hardware components of of certain devices to perform certain function... claim is nothing but a method claim...no locus stand to obviate objections of 3(k)...”

# Solutions: Conclusion

- Softwares embedded with specific hardware are patentable. (embedded system)
- System software may not be excluded subject matter as it operates/controls computer hardwares and hence patentable. (*e.g os kernel, device drivers*)
- Business methods based software is not patentable.

# Solutions: Conclusion (contd..)

- Mathematical methods based software may be allowed if the mathematics or algorithm in question is complicated enough and may not be implemented with pencil and paper.
- Computer program product i.e computer program code stored in a computer readable medium is computer program per se and hence not patentable.

# Thank you..

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